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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,684	11/19/2001	Corey M. Grove	DAM 557-01	5881

24211 7590 06/04/2003

US ARMY SOLDIER AND BIOLOGICAL CHEMICAL COMMAND
OFFICE OF THE CHIEF COUNSEL/IP TEAM (BLDG E4435)
5183 BLACKHAWK ROAD
APG, MD 21010-5424

EXAMINER

MENDOZA, MICHAEL G

ART UNIT PAPER NUMBER

3761

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/992,684

Applicant(s)

GROVE ET AL.

Examiner

Michael G. Mendoza

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see page 2, lines 18-20, filed March 26, 2003, with respect to the rejection(s) of claim(s) 1 and 17 under 35 USC 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Ikonen 5758639 in view of Lane 5555569..

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims (1, 9, and 13-17). Therefore, the breathe-through airflow assembly (positive/negative) and filter unit; a port for connecting a source of breathing oxygen; blower device; and electronic display must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-4, 7, 9-13, and 17-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Ikonen 5758639 in view of Lane 5555569.

5. Ikonen teaches a modular helmet-mask assembly which comprises: a helmet comprising an impact resistant material; a face protection assembly comprising: a face protection shell; a vision port; a flexible nosecup comprising a breathe-through airflow assembly and a filter unit; a flexible face seal; a transparent, impact resistant lens rotatably attached at front part of the helmet; wherein the filter unit comprises a filter element comprising a material capable of filtering chemical vapors and biological aerosols (col. 1, lines 28-45). It should be noted that Ikonen fails to teach an adjustable head harness. It should be further noted that Ikonen fails to teach wherein the face protection assembly is alternately attachable to and detachable from a front part of the helmet.

6. Lane teaches an assembly with a common head harness for adjusting fit. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the adjustable head harness of Lane to maintain a secure fit for both the mask and helmet (col. 2, lines 3-7).

7. Lane discloses the claimed invention except for the face protection assembly is detachable. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the face protection assembly detachable, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

8. Ikonen/Lane teaches a modular helmet-mask assembly comprising a poston adjustable adjustment pad, a port for connecting a source of breathing oxygen; a tightening adjustment knob; a negative pressure filter assembly

9. As to claim 11, Ikonen/Lane discloses the claimed invention except for the filter element comprises a carbon filter. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a carbon filter since it was known in that carbon filters are effective for removing harmful gases.

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ikonen/Lane in view of Epperson et al. 6279172.

11. Ikonen/Lane teaches the helmet-assembly of claim 1. It should be noted that Ikonen/Lane fails to specifically teach the impact resistant shell material comprises graphite, fiberglass, or combinations thereof.

12. Epperson et al. teaches an assembly with common impact resistant material. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the graphite of Epperson et al. for its strong and lightweight properties (col. 3, lines 28-29).

13. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ikonen/Lane in view of Sundahl 4549541.

14. Ikonen/Lane teaches the helmet-assembly of claim 1. It should be noted that Ikonen/Lane fails to specifically teach the impact resistant lens comprises polycarbonate, polyurethane, or combinations thereof.

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15. Sundahl teaches an assembly with impact resistant lens comprises polycarbonate, polyurethane, or combinations thereof. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the impact resistant lens of Sundahl to provide protection during impact (col. 3, lines 8-9).

16. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikonen/Lane in view of Simpson 4886056.

17. Ikonen/Lane teaches the helmet-mask assembly of claim 1. It should be noted that Ikonen/Lane fails to teach a positive pressure/circulating filter blower device.

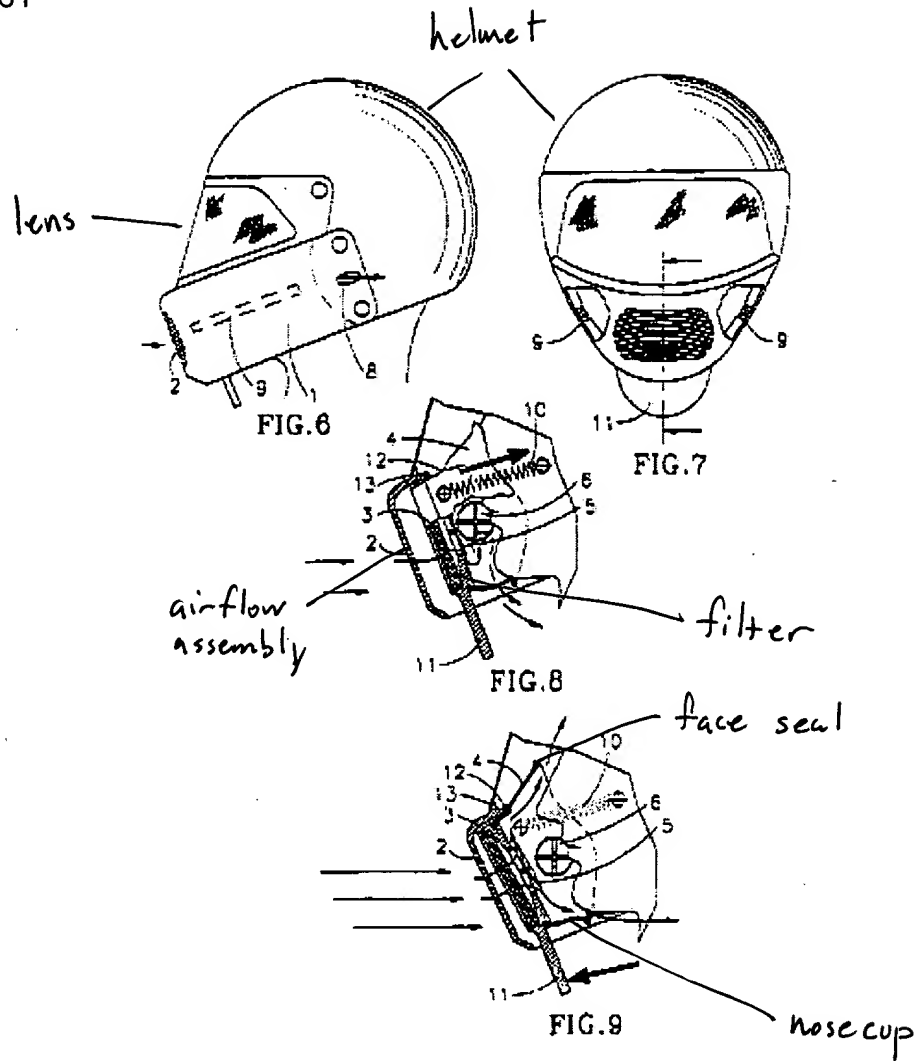
18. Simpson teaches an assembly with a common blower device. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the blower of Simpson to provide protection against the ingress of noxious fumes (col. 1, lines 9-18).

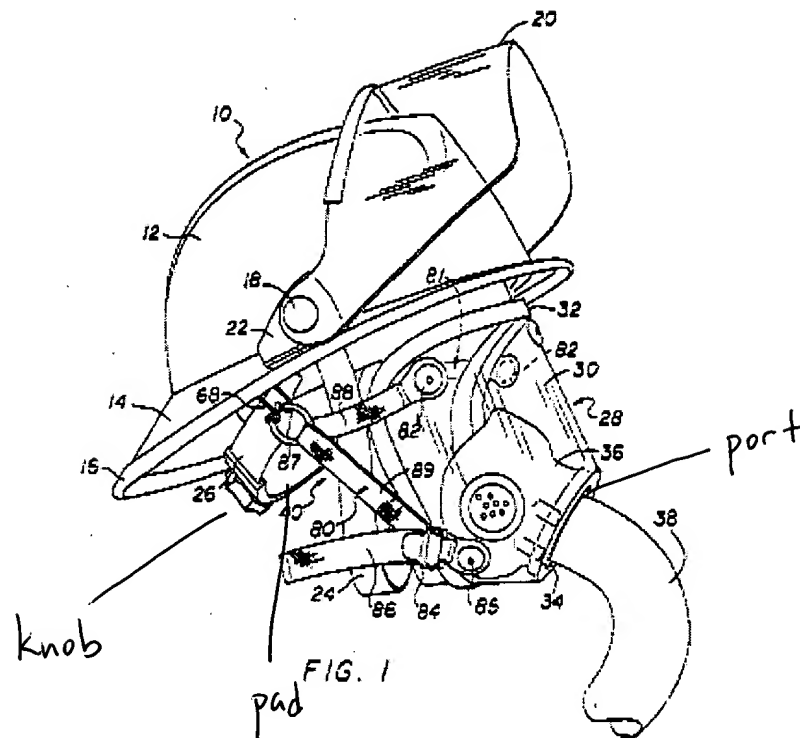
19. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ikonen/Lane in view of Griffiths 5649532.

20. Ikonen/Lane teaches the helmet-mask assembly of claim 1. It should be noted that Ikonen/Lane fails to teach an electronic display.

21. Griffiths teaches an assembly with a common electronic display. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the display of Griffiths to provide a screen for showing information for viewing by the user (col. 3, lines 25-30).

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Contacts

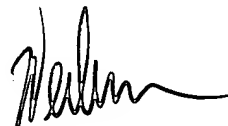
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael G. Mendoza whose telephone number is (703) 305-3285. The examiner can normally be reached on Mon.-Fri. 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (703) 308-1957. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 306-4520 for regular communications and (703) 306-4520 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.



MM
May 27, 2003



WEILUN LO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700